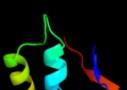
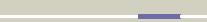
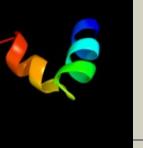
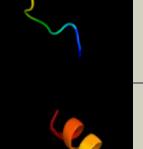
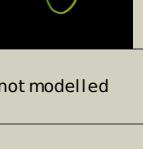


# Phyre<sup>2</sup>

Email	I.a.kelley@imperial.ac.uk
Description	P0ADE6
Date	Wed Jan 25 15:20:27 GMT 2012
Unique Job ID	7fcfdbe54943d64f

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2l9yA_			99.6	32	<b>PDB header:</b> sugar binding protein <b>Chain:</b> A; <b>PDB Molecule:</b> cvnh-lysm lectin; <b>PDBTitle:</b> solution structure of the mocvnh-lysm module from the rice blast2 fungus magnaporthe oryzae protein (mgg_03307)
2	d1e0ga_			99.5	27	<b>Fold:</b> LysM domain <b>Superfamily:</b> LysM domain <b>Family:</b> LysM domain
3	c2djpa_			99.5	24	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A; <b>PDB Molecule:</b> hypothetical protein sb145; <b>PDBTitle:</b> the solution structure of the lsm domain of human2 hypothetical protein sb145
4	d1y7ma2			99.4	34	<b>Fold:</b> LysM domain <b>Superfamily:</b> LysM domain <b>Family:</b> LysM domain
5	c2gu1A_			98.7	36	<b>PDB header:</b> hydrolase <b>Chain:</b> A; <b>PDB Molecule:</b> zinc peptidase; <b>PDBTitle:</b> crystal structure of a zinc containing peptidase from2 vibrio cholerae
6	c1y7mb_			98.1	33	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> B; <b>PDB Molecule:</b> hypothetical protein bsu14040; <b>PDBTitle:</b> crystal structure of the b. subtilis ykud protein at 2 a2 resolution
7	c2elhA_			34.9	4	<b>PDB header:</b> dna binding protein <b>Chain:</b> A; <b>PDB Molecule:</b> cg11849-pa; <b>PDBTitle:</b> solution structure of the cenp-b n-terminal dna-binding2 domain of fruit fly distal antenna cg11849-pa
8	d1k78a1			26.3	24	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> Homeodomain-like <b>Family:</b> Paired domain
9	d1y0pa3			26.2	14	<b>Fold:</b> Succinate dehydrogenase/fumarate reductase flavoprotein, catalytic domain <b>Superfamily:</b> Succinate dehydrogenase/fumarate reductase flavoprotein, catalytic domain <b>Family:</b> Succinate dehydrogenase/fumarate reductase flavoprotein, catalytic domain
10	c2r0qF_			21.4	26	<b>PDB header:</b> recombination/dna <b>Chain:</b> F; <b>PDB Molecule:</b> putative transposon tn552 dna-invertase bin3; <b>PDBTitle:</b> crystal structure of a serine recombinase- dna regulatory2 complex
11	c2lfcA_			17.8	10	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A; <b>PDB Molecule:</b> fumarate reductase, flavoprotein subunit; <b>PDBTitle:</b> solution nmr structure of fumarate reductase flavoprotein subunit from2 lactobacillus plantarum, northeast structural genomics consortium3 target lpr145j

12	<a href="#">d2ofya1</a>	Alignment		16.2	11	<b>Fold:</b> lambda repressor-like DNA-binding domains <b>Superfamily:</b> lambda repressor-like DNA-binding domains <b>Family:</b> SinR domain-like
13	<a href="#">d1siga_</a>	Alignment		15.2	11	<b>Fold:</b> Sigma2 domain of RNA polymerase sigma factors <b>Superfamily:</b> Sigma2 domain of RNA polymerase sigma factors <b>Family:</b> Sigma2 domain of RNA polymerase sigma factors
14	<a href="#">c2a6eF_</a>	Alignment		14.6	16	<b>PDB header:</b> transferase <b>Chain:</b> F: <b>PDB Molecule:</b> rna polymerase sigma factor rpd; <b>PDBTitle:</b> crystal structure of the t. thermophilus rna polymerase2 holoenzyme
15	<a href="#">d1smyf3</a>	Alignment		13.5	16	<b>Fold:</b> Sigma2 domain of RNA polymerase sigma factors <b>Superfamily:</b> Sigma2 domain of RNA polymerase sigma factors <b>Family:</b> Sigma2 domain of RNA polymerase sigma factors
16	<a href="#">d1ku2a2</a>	Alignment		13.3	15	<b>Fold:</b> Sigma2 domain of RNA polymerase sigma factors <b>Superfamily:</b> Sigma2 domain of RNA polymerase sigma factors <b>Family:</b> Sigma2 domain of RNA polymerase sigma factors
17	<a href="#">d1iyjb3</a>	Alignment		13.0	18	<b>Fold:</b> OB-fold <b>Superfamily:</b> Nucleic acid-binding proteins <b>Family:</b> Single strand DNA-binding domain, SSB
18	<a href="#">d1hlva1</a>	Alignment		12.8	15	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> Homeodomain-like <b>Family:</b> Centromere-binding
19	<a href="#">d2cx1a1</a>	Alignment		12.3	30	<b>Fold:</b> PUA domain-like <b>Superfamily:</b> PUA domain-like <b>Family:</b> PUA domain
20	<a href="#">d1bxla_</a>	Alignment		11.3	4	<b>Fold:</b> Toxins' membrane translocation domains <b>Superfamily:</b> Bcl-2 inhibitors of programmed cell death <b>Family:</b> Bcl-2 inhibitors of programmed cell death
21	<a href="#">d1rr7a_</a>	Alignment	not modelled	11.2	17	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> Homeodomain-like <b>Family:</b> Middle operon regulator, Mor
22	<a href="#">c1rr7A_</a>	Alignment	not modelled	11.2	17	<b>PDB header:</b> transcription <b>Chain:</b> A: <b>PDB Molecule:</b> middle operon regulator; <b>PDBTitle:</b> crystal structure of the middle operon regulator protein of2 bacteriophage mu <b>PDB header:</b> transcription <b>Chain:</b> A: <b>PDB Molecule:</b> sigma factor sigma; <b>PDBTitle:</b> crystal structure of thermus aquaticus rna polymerase sigma2 subunit fragment containing regions 1.2 to 3.1
23	<a href="#">c1ku2A_</a>	Alignment	not modelled	11.1	16	<b>Fold:</b> Succinate dehydrogenase/fumarate reductase flavoprotein, catalytic domain <b>Superfamily:</b> Succinate dehydrogenase/fumarate reductase flavoprotein, catalytic domain <b>Family:</b> Succinate dehydrogenase/fumarate reductase flavoprotein, catalytic domain
24	<a href="#">d1d4ca3</a>	Alignment	not modelled	10.6	32	<b>PDB header:</b> apoptosis <b>Chain:</b> A: <b>PDB Molecule:</b> bcl-2 homologous antagonist/killer; <b>PDBTitle:</b> crystal structure of human bcl-2 family protein bak
25	<a href="#">c2yv6A_</a>	Alignment	not modelled	10.4	4	<b>PDB header:</b> transcription <b>Chain:</b> H: <b>PDB Molecule:</b> sigma factor sigma; <b>PDBTitle:</b> thermus aquaticus rna polymerase holoenzyme at 4 a2 resolution
26	<a href="#">c1I9uH_</a>	Alignment	not modelled	10.3	16	<b>PDB header:</b> transcription <b>Chain:</b> H: <b>PDB Molecule:</b> sigma factor sigma; <b>PDBTitle:</b> thermus aquaticus rna polymerase holoenzyme at 4 a2 resolution
27	<a href="#">d6paxa1</a>	Alignment	not modelled	10.2	23	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> Homeodomain-like <b>Family:</b> Paired domain
28	<a href="#">c2w48D_</a>	Alignment	not modelled	10.1	15	<b>PDB header:</b> transcription <b>Chain:</b> D: <b>PDB Molecule:</b> sorbitol operon regulator; <b>PDBTitle:</b> crystal structure of the full-length sorbitol operon2

						regulator sorc from klebsiella pneumoniae
29	<a href="#">d1mia3</a>	Alignment	not modelled	9.7	27	<b>Fold:</b> OB-fold <b>Superfamily:</b> Nucleic acid-binding proteins <b>Family:</b> Single strand DNA-binding domain, SSB
30	<a href="#">d1bw6a</a>	Alignment	not modelled	9.6	15	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> Homeodomain-like <b>Family:</b> Centromere-binding
31	<a href="#">c3d79A</a>	Alignment	not modelled	9.3	13	<b>PDB header:</b> unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> putative uncharacterized protein ph0734; <b>PDBTitle:</b> crystal structure of hypothetical protein ph0734.1 from2 hyperthermophilic archaea pyrococcus horikoshii ot3
32	<a href="#">d1g5ma</a>	Alignment	not modelled	8.9	4	<b>Fold:</b> Toxins' membrane translocation domains <b>Superfamily:</b> Bcl-2 inhibitors of programmed cell death <b>Family:</b> Bcl-2 inhibitors of programmed cell death
33	<a href="#">d1o0la</a>	Alignment	not modelled	8.7	4	<b>Fold:</b> Toxins' membrane translocation domains <b>Superfamily:</b> Bcl-2 inhibitors of programmed cell death <b>Family:</b> Bcl-2 inhibitors of programmed cell death
34	<a href="#">c2o2fA</a>	Alignment	not modelled	8.5	4	<b>PDB header:</b> apoptosis <b>Chain:</b> A: <b>PDB Molecule:</b> apoptosis regulator bcl-2; <b>PDBTitle:</b> solution structure of the anti-apoptotic protein bcl-2 in2 complex with an acyl-sulfonamide-based ligand
35	<a href="#">c2gm4B</a>	Alignment	not modelled	8.2	24	<b>PDB header:</b> recombination, dna <b>Chain:</b> B: <b>PDB Molecule:</b> transposon gamma-delta resolvase; <b>PDBTitle:</b> an activated, tetrameric gamma-delta resolvase: hin chimaera bound to2 cleaved dna
36	<a href="#">d1zy3a1</a>	Alignment	not modelled	8.2	4	<b>Fold:</b> Toxins' membrane translocation domains <b>Superfamily:</b> Bcl-2 inhibitors of programmed cell death <b>Family:</b> Bcl-2 inhibitors of programmed cell death
37	<a href="#">d2bt6a1</a>	Alignment	not modelled	8.0	24	<b>Fold:</b> beta-Grasp (ubiquitin-like) <b>Superfamily:</b> 2Fe-2S ferredoxin-like <b>Family:</b> 2Fe-2S ferredoxin-related
38	<a href="#">c2x48B</a>	Alignment	not modelled	7.8	21	<b>PDB header:</b> viral protein <b>Chain:</b> B: <b>PDB Molecule:</b> cag38821; <b>PDBTitle:</b> orf 55 from sulfolobus islandicus rufivirus 1
39	<a href="#">d2ponb1</a>	Alignment	not modelled	7.6	4	<b>Fold:</b> Toxins' membrane translocation domains <b>Superfamily:</b> Bcl-2 inhibitors of programmed cell death <b>Family:</b> Bcl-2 inhibitors of programmed cell death
40	<a href="#">d2fug33</a>	Alignment	not modelled	7.4	11	<b>Fold:</b> beta-Grasp (ubiquitin-like) <b>Superfamily:</b> 2Fe-2S ferredoxin-like <b>Family:</b> 2Fe-2S ferredoxin domains from multidomain proteins
41	<a href="#">c3f56F</a>	Alignment	not modelled	7.0	32	<b>PDB header:</b> structural protein <b>Chain:</b> F: <b>PDB Molecule:</b> csos1d; <b>PDBTitle:</b> the structure of a previously undetected carboxysome shell2 protein: csos1d from prochlorococcus marinus med4
42	<a href="#">c2xa0A</a>	Alignment	not modelled	7.0	4	<b>PDB header:</b> apoptosis <b>Chain:</b> A: <b>PDB Molecule:</b> apoptosis regulator bcl-2; <b>PDBTitle:</b> crystal structure of bcl-2 in complex with a bax bh3 peptide
43	<a href="#">c2vofA</a>	Alignment	not modelled	7.0	4	<b>PDB header:</b> apoptosis <b>Chain:</b> A: <b>PDB Molecule:</b> bcl-2-related protein a1; <b>PDBTitle:</b> structure of mouse a1 bound to the puma bh3-domain
44	<a href="#">d1u9ka</a>	Alignment	not modelled	6.6	31	<b>Fold:</b> Immunoglobulin-like beta-sandwich <b>Superfamily:</b> Immunoglobulin <b>Family:</b> V set domains (antibody variable domain-like)
45	<a href="#">c3t76A</a>	Alignment	not modelled	6.6	26	<b>PDB header:</b> transcription regulator <b>Chain:</b> A: <b>PDB Molecule:</b> transcriptional regulator vanug; <b>PDBTitle:</b> crystal structure of transcriptional regulator vanug, form ii
46	<a href="#">c1y6uA</a>	Alignment	not modelled	6.5	19	<b>PDB header:</b> dna binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> excisionase from transposon tn916; <b>PDBTitle:</b> the structure of the excisionase (xis) protein from2 conjugative transposon tn916 provides insights into the3 regulation of heterobivalent tyrosine recombinases
47	<a href="#">d1ysga1</a>	Alignment	not modelled	6.1	4	<b>Fold:</b> Toxins' membrane translocation domains <b>Superfamily:</b> Bcl-2 inhibitors of programmed cell death <b>Family:</b> Bcl-2 inhibitors of programmed cell death
48	<a href="#">c3b7hA</a>	Alignment	not modelled	5.9	11	<b>PDB header:</b> structural protein <b>Chain:</b> A: <b>PDB Molecule:</b> prophage lp1 protein 11; <b>PDBTitle:</b> crystal structure of the prophage lp1 protein 11
49	<a href="#">c1zs7A</a>	Alignment	not modelled	5.9	30	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein ape0525; <b>PDBTitle:</b> the structure of gene product ape0525 from aeropyrum pernix
50	<a href="#">c2rrdA</a>	Alignment	not modelled	5.9	7	<b>PDB header:</b> dna binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> hrdc domain from bloom syndrome protein; <b>PDBTitle:</b> structure of hrdc domain from human bloom syndrome protein, blm
51	<a href="#">c2kpjA</a>	Alignment	not modelled	5.8	6	<b>PDB header:</b> transcription regulator <b>Chain:</b> A: <b>PDB Molecule:</b> sos-response transcriptional repressor, lexA; <b>PDBTitle:</b> solution structure of protein sos-response transcriptional2 repressor, lexA from eubacterium rectale. northeast3 structural genomics consortium target err9a
52	<a href="#">d1pq1a</a>	Alignment	not modelled	5.7	4	<b>Fold:</b> Toxins' membrane translocation domains <b>Superfamily:</b> Bcl-2 inhibitors of programmed cell death <b>Family:</b> Bcl-2 inhibitors of programmed cell death
53	<a href="#">c2rn7A</a>	Alignment	not modelled	5.4	10	<b>PDB header:</b> unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> is629 orfa; <b>PDBTitle:</b> nmr solution structure of tnpE protein from shigella2 flexneri. northeast structural genomics target sfr125
54	<a href="#">c2aukA</a>	Alignment	not modelled	5.4	42	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> dna-directed rna polymerase beta' chain;

PDBTitle: structure of e. coli rna polymerase beta' g/g' insert					
55	<a href="#">d1jala2</a>	Alignment	not modelled	5.4	36 <b>Fold:</b> beta-Grasp (ubiquitin-like) <b>Superfamily:</b> TGS-like <b>Family:</b> G domain-linked domain
56	<a href="#">d1y9qa2</a>	Alignment	not modelled	5.3	14 <b>Fold:</b> Double-stranded beta-helix <b>Superfamily:</b> RmlC-like cupins <b>Family:</b> Probable transcriptional regulator VC1968, C-terminal domain
57	<a href="#">d1wi0a_</a>	Alignment	not modelled	5.3	28 <b>Fold:</b> beta-Grasp (ubiquitin-like) <b>Superfamily:</b> CAD & PB1 domains <b>Family:</b> PB1 domain
58	<a href="#">d1p9ka_</a>	Alignment	not modelled	5.3	18 <b>Fold:</b> Alpha-L RNA-binding motif <b>Superfamily:</b> Alpha-L RNA-binding motif <b>Family:</b> YbcJ-like
59	<a href="#">c3clcC_</a>	Alignment	not modelled	5.2	25 <b>PDB header:</b> transcription regulator/dna <b>Chain:</b> C: <b>PDB Molecule:</b> regulatory protein; <b>PDBTitle:</b> crystal structure of the restriction-modification controller protein2 c.esp1396i tetramer in complex with its natural 35 base-pair operator
60	<a href="#">c2xyxA_</a>	Alignment	not modelled	5.2	31 <b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical conserved protein, gk0453; <b>PDBTitle:</b> crystal structure of hypothetical conserved protein, gk0453
61	<a href="#">c1u78A_</a>	Alignment	not modelled	5.1	8 <b>PDB header:</b> dna binding protein/dna <b>Chain:</b> A: <b>PDB Molecule:</b> transposable element tc3 transposase; <b>PDBTitle:</b> structure of the bipartite dna-binding domain of tc32 transposase bound to transposon dna
62	<a href="#">c2ewtA_</a>	Alignment	not modelled	5.1	12 <b>PDB header:</b> dna binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> putative dna-binding protein; <b>PDBTitle:</b> crystal structure of the dna-binding domain of bldd